### UNITED STATES DISTRICT COURT NORTHERN DISTRICT OF ILLINOIS EASTERN DIVISION

UNITED STATES OF AMERICA,	)
Plaintiff,	)
v,	) ) No. 08 CR 192
HANJUAN JIN,	) Judge Ruben Castille
Defendant.	)

### **MEMORANDUM OPINION AND ORDER**

Hanjuan Jin ("Defendant" or "Jin") is charged with stealing trade secrets in violation of the Economic Espionage Act, 18 U.S.C. § 1831 et seq. ("EEA"). (R. 37, Superseding Indictment.) Presently before the Court is the Government's motion in limine seeking the exclusion of certain expert testimony by Jin's expert witness, Dr. Ray W. Nettleton, from trial. (R. 163, Govt. Mot.) For the reasons stated below, the motion is granted in part and denied in part.

#### **BACKGROUND**

Jin is charged with violating provisions of the Economic Espionage Act, 18 U.S.C. § 1831 *et seq.* (R. 37, Superseding Indictment.) Specifically, the indictment charges Jin with three counts of possessing trade secrets—one count for each trade secret document—with intent to convert them to the economic benefit of someone other than the owner, intending and knowing that the offense would injure the owner, in violation of § 1832(a)(3). (*Id.* at 4-6.) The indictment also charges Jin with three counts of possessing trade secrets, knowing the trade secrets were stolen, appropriated, obtained, and converted without authorization, intending and knowing that the offense would benefit a foreign government, in violation of § 1831(a)(3). (*Id.* at 7-9.) In

sum, Jin is charged with stealing three documents containing trade secrets pertaining to telecommunications technology from Company A, and intending to convert those trade secrets to the benefit of a telecommunications competitor in China, Sun Kaisens, and the Chinese military.

To sustain each of the charges, the Government must prove that the trade secret documents did, in fact, contain information that is a "trade secret" as defined by the EEA. The EEA defines a trade secret as "all forms and types of . . . information . . . if (A) the owner [of the information] has taken reasonable measures to keep such information secret; and (B) the information derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable through proper means by, the public[.]" 18 U.S.C. § 1839. Accordingly, the Government must prove the following elements as to each of the three documents at issue in this case: "(1) that the information is actually secret because it is neither known to, nor readily ascertainable by, the public; (2) that the owner took reasonable measures to maintain that secrecy; and (3) that independent economic value derived from that secrecy."

\*United States v. Chung, No. 10-50074, 2011 WL 4436271, at \*7 (9th Cir. Sept. 26, 2011).

#### ANALYSIS

Rule 702 of the Federal Rules of Evidence and the body of case law that has developed from the Supreme Court's decision in *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579 (1993), govern the admissibility of expert witness testimony. Under Rule 702, expert testimony is admissible if "scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue." Fed. R. Evid. 702. Rule 702 also "requires that (1) the testimony must be based upon sufficient facts or data; (2) it must be the product of reliable principles and methods; and (3) the witness must have applied the principles

and methods reliably to the facts of the case." *Happel v. Walmart Stores, Inc.*, 602 F.3d 820, 824 (7th Cir. 2010) (citing Fed. R. Evid. 702).

Rule 702 requires that the district court act as a "gatekeeper' who determines whether proffered expert testimony is reliable and relevant before accepting a witness as an expert."

Autotech Tech. Ltd. P'ship v. Automationdirect.com, 471 F.3d 745, 749 (7th Cir. 2006). In exercising its gatekeeper function, a district court must examine (among other things): (1) the expert's qualifications; (2) the expert's methodologies; and (3) the relevance of the expert's proposed testimony. Adams v. Ameritech Servs., 231 F.3d 414, 423 (7th Cir. 2000). The proponent of the expert bears the burden of demonstrating that the expert's testimony would satisfy Rule 702 and Daubert. Lewis v. CITGO Petroleum Corp., 561 F.3d 698, 705 (7th Cir. 2009). Although required to perform its role as a gatekeeper, a district court's "[d]eterminations on admissibility should not supplant the adversarial process; shaky expert testimony may be admissible, assailable by its opponents through cross examination." Gayton v. McCoy, 593 F.3d 610, 616 (7th Cir. 2010).

Based on Jin's expert disclosure, the Government expects that Jin's expert, Dr. Nettleton, will opine at trial that the three documents identified as trade secrets in the indictment do not meet the statutory criteria set forth in 18 U.S.C. § 1839 of a trade secret. The Government challenges five potential areas of testimony by Dr. Nettleton. The Court will consider each in turn.

### I. Testimony regarding the obsolescence of iDEN technology

The Government first argues that Dr. Nettleton should not be permitted to testify regarding the obsolescence of iDEN technology. In Jin's expert disclosure, Dr. Nettleton

presents a historical overview of the development and evolution of cellular telephone technology, beginning with two-way radios and moving through first ("1G"), second ("2G"), third ("3G"), and fourth generation ("4G") cellphones. (Def.'s Disc. at 3-9.)\(^1\) According to Dr. Nettleton, each successive generation of cellphone technology has brought advances in the efficiency and speed of data flow capacities. (*Id.*) Dr. Nettleton contends that iDEN—the technology that is the subject of the purported trade secret documents—is a "proprietary form of the second generation of cellphone technology." (*Id.* at 10.) Because of certain technical constraints on the iDEN system performance, Dr. Nettleton believes that "it is a developmental 'dead end' when it comes to evolution into the high data rates associated with 3G, 4G and later generations." (*Id.* at 13.) Accordingly, he opines, "[i]t is inherently obsolete because wider bandwidth is needed to support higher data rates." (*Id.* at 14.) As a result, sales of iDEN were "already in decline in 2006," and providers were making plans to phase all customers out of products using iDEN. (*Id.* at 14-15.)

The Government argues that this testimony should be excluded because it is irrelevant to the issues of the case. (R. 163, Govt. Mot. at 5-6.) "An expert's credentials and methodology may be impeccable, but if the proffered testimony fails the general test of relevance under Rule 402, or if, in the words of Rule 702 it is not likely to 'assist the trier of fact to understand the evidence or to determine a fact in issue,' then the district court should reject the proffer." *United States v. Hall*, 93 F.3d 1337, 1342 (7th Cir. 1996). According to the Government, the pertinent question is "whether the charged documents derived economic value, whether actual or potential, from not being generally known or readily ascertainable through proper means by the public."

<sup>&</sup>lt;sup>1</sup> The Government provided a copy of Jin's expert disclosure with its motion, and requested leave to file a copy under seal. The Court grants the Government leave to file under seal a copy of Jin's expert disclosure. As the disclosure has not received a record number on the docket for this case, the Court will refer to the document as "Def.'s Disc." followed by the page number.

(R. 163, Govt. Mot. at 6.) Under this inquiry, the Government argues, "[t]he existence of newer, even potentially superior, technologies at the time has no bearing on whether the specific information in the charged trade secret documents had value to Company A at that point in time."

(Id.)

The Court rejects this overly narrow view of what is relevant to the determination of the economic value of the secrecy of the charged documents. Dr. Nettleton's opinion that iDEN technology was obsolete in 2007 given the other technology available is clearly relevant to this inquiry. As Jin argues, "[w]hat has value in a marketplace at a particular time can only be defined with reference to what else is available and what is in development." (R. 177, Def.'s Resp. at 6.) The Government is free to argue, as its brief indicates it will, that the newer technologies are not superior to iDEN and that the iDEN technology—and its secrecy—had value to Company A. (R. 163, Govt. Mot. at 6, fn.5.) The Government's disagreement with Dr. Nettleton's opinion, however, does not render his opinion irrelevant. The Court accordingly declines to exclude Dr. Nettleton's opinion that iDEN was obsolete in 2007 or his testimony regarding the alternative technologies available that provide the backdrop for this conclusion.

## II. Testimony regarding the possibility of reverse engineering

The Government next challenges Dr. Nettleton's opinion regarding the possibility of the reverse-engineering of iDEN by Chinese entities. In the disclosure, Dr. Nettleton concludes that there was "plenty of time" for Chinese entities "to perform any reverse-engineering" of the iDEN technology seized from Jin in 2007. (Def.'s Disc. at 17.) In support of this conclusion, he: (1) cites a pronouncement by an entity of the Chinese government in 2000 regarding the standards for iDEN technology; (2) states that the iDEN technology has been available in China since the

mid-1990s; and (3) lists three companies offering iDEN services in China. (*Id.*) According to Dr. Nettleton, "all of this" provided enough time for Chinese entities "to have independently derived the iDEN technology seized from the Defendant in 2007." (*Id.*)

The Government contends that this testimony should be excluded because "there are insufficient facts to support this proposition, it is not based on reliable principles, and it is irrelevant to the issues." (R. 163, Govt. Mot. at 7.) Given the perfunctory support and the logical leap required to reach Dr. Nettleton's conclusion, the Court agrees that this testimony should be excluded.

Seeking to avoid this result, Jin contends that given the facts listed above, Dr. Nettleton "makes the logical connections that (1) because IDEN systems were in China [and] (2) hardware, software, and documentation for iDEN was also already in China . . . (3) that would have provided sufficient opportunity and time for Chinese entities to have reverse-engineered the technology, had they been interested in doing so." (R. 177, Def.'s Resp. at 8-9.) The Court disagrees. To Dr. Nettleton, an expert in this area, these may be "logical connections," but to the Court, the jump from these few facts to the conclusion is not sufficiently supported. *See Gen. Elec. Co. v. Joiner*, 522 U.S. 136, 146 (1997) ("A court may conclude that there is simply too great an analytical gap between the data and the opinion proffered.") (citation omitted). Dr. Nettleton's cursory support for his conclusion does not provide any information regarding how complicated the task of reverse-engineering the iDEN technology would be, whether and how many Chinese entities had the technical expertise and resources to accomplish the task, or the time it would likely take given the available technical expertise and resources. The link between the facts and Dr. Nettleton's conclusion is missing; the opinion jumps from the fact that iDEN

was available for several years in China to the conclusion that this was "plenty of time" for reverse engineering to have taken place. *See United States v. Mamah*, 332 F.3d 475, 478 (7th Cir. 2003) ("It is critical under Rule 702 that there be a link between the facts or data that the expert has worked with and the conclusion the expert's testimony is intended to support."). Accordingly, the Court will exclude Dr. Nettleton's opinion that there was "plenty of time to perform any reverse-engineering needed to have independently derived the iDEN technology seized from the Defendant in 2007."

# III. Testimony regarding the documents found in Jin's possession and the Chinese government's lack of interest in the iDEN technology

Third, the Government requests that the Court excludes any testimony by Dr. Nettleton regarding the lack of interest in iDEN by the Chinese government. In the expert disclosure, Dr. Nettleton states that documents seized from Jin "reveal that the military were concentrating on . . . technology in their future systems" that have "no overlap or compatibility" with iDEN. (Def.'s Disc. at 30.) Because this technology is more advanced than iDEN, Dr. Nettleton concludes that "the Chinese military would not gain from knowledge of the [Company A] documents." (Id.)

The Government argues that this opinion, which they characterize as stating that "the Chinese government lacked interest in iDEN," should be excluded because "(1) Dr. Nettleton is not sufficiently qualified to opine on matters related to the strategic goals of the Chinese government and (2) there is insufficient data to support Dr. Nettleton's conclusion." (R. 163, Govt. Mot. at 8.)

Regarding the Government's first ground for excluding this testimony, the Court agrees that Jin has not established that Dr. Nettleton has expertise related to the strategic goals of the

Chinese government. This is of no matter, however, because he will not be offering any opinion on China's strategic goals. (R. 177, Def.'s Resp. at 9.) Rather, Dr. Nettleton will testify regarding the contents of the documents seized from Jin that are purportedly from or about the Chinese military communications systems and industry, and whether iDEN is relevant to or compatible with the technology described in the documents. His opinion is thus limited to whether the iDEN technology at issue in this case is compatible with the technological needs of the Chinese military as expressed in the documents found in Jin's possession. He does not need to be an expert on China's strategic goals to offer this narrow opinion. Dr. Nettleton should be instructed, however, to properly confine his testimony to this defined area.

The Government's second ground for excluding this testimony—insufficient data—also fails for the same reason. Dr. Nettleton's opinion is about the significance of the documents found in Jin's possession in 2007; he does not claim to make global conclusions about China's strategic goals. (Def.'s Disc. at 30.) Accordingly, it is logical that the "data" for his conclusion is limited to these documents, many of which the Government will introduce at trial.

Accordingly, the Court declines to exclude Dr. Nettleton's testimony that the documents found in Jin's possession indicate that the Chinese military did not have an interest in iDEN.

The Government's exclusion arguments go more to the weight then the underlying admissibility of Dr. Nettleton's testimony, which can be fully cross-examined for proper evaluation by the trier of fact.

# IV. Testimony regarding the value of the trade secret information to local telecommunications company

The fourth area of purported testimony by Dr. Nettleton challenged by the Government is any testimony regarding the local telecommunications company where Jin worked while she was on medical leave from Company A. (R. 163, Govt. Mot. at 9.) The Government contends that such testimony lacks relevance to this case because the Government does not intend to argue that Jin's conduct was intended to benefit the local telecommunications company. (*Id.*) Based on the Government's representation, Jin has agreed to not offer testimony by Dr. Nettleton related to the local telecommunications company. (R. 177, Def.'s Resp. at 11.)

## V. Testimony regarding the documents found in Jin's possession and the trade secret information's lack of value to Sun Kaisens

Fifth, the Government challenges testimony by Dr. Nettleton that the trade secret information lacked value to Sun Kaisens, a China-based telecommunications company that does work for the Chinese military. (R. 163, Govt. Mot. at 9.) Certain documents seized from Jin were purportedly from Sun Kaisens, and contained descriptions of Sun Kaisen's key products. (Def.'s Disc. at 32-33.) According to Dr. Nettleton, the descriptions of the products "do[] not remotely resemble any part of iDEN" and thus "Sun Kaisens would not gain from knowledge of the three documents cited in the indictment[.]" (*Id.* at 33-34.)

The Government argues that this is "speculative opinion testimony" that should be excluded for lack of foundation because "Dr. Nettleton expresses no knowledge of Sun Kaisens as an entity, its products or strategies outside of the documents made available to him in this case." (R. 163, Govt. Mot. at 10.) Just as this argument was not convincing with regards to Dr. Nettleton's opinions about the Chinese military's interest in iDEN based on the documents found in Jin's possession, it also fails here. Dr. Nettleton's opinion is limited to what Sun Kaisen's

interests or needs were as expressed in the documents found on Jin in 2007; those documents—combined with his expertise in the field of telecommunication technology—clearly provide the foundation for his opinion. The Court will therefore not exclude this testimony, with the same caveat that Dr. Nettleton must confine his expert testimony to this issue.

### VI. Testimony regarding the sunk cost dilemma

Finally, the Government challenges Dr. Nettleton's opinion that iDEN reflects a failed business strategy referred to as the "Sunk Cost Dilemma." According to Dr. Nettleton, "[f]or years iDEN has been consuming [Company A's] financial and personnel resources in support of obsolete technology, demonstrating the Sunk Cost Dilemma familiar to business strategists." (Def.'s Disc. at 35.) Because these "sunk costs" include the research and development ("R&D") investment, Dr. Nettleton opines that "there would be little or no monetary loss from R&D from the unauthorized dissemination of iDEN technology, including from the three documents cited in the indictment." (*Id.*)

The Government argues that this testimony should be excluded because "Dr. Nettleton's position is inconsistent with the statutory definitions with which he claims familiarity" and "wholly unsupported by any analysis or otherwise reliable principle." (R. 163, Govt. Mot. at 10.) The Court has significant doubts about the admissibility of this testimony based on the conclusory nature of Dr. Nettleton's opinion. He provides no facts or data regarding the amount spent by Company A on R&D for iDEN or how much revenue Company A has earned from iDEN. His conclusion that the R&D for iDEN was a "sunk cost," therefore, is unsupported and therefore excludable. *See, e.g., Kenosha v. Heublein*, 895 F.2d 418, 420 (7th Cir. 1990) ("Expert opinions are worthless without data and reasons."). The Court declines to definitively rule on

this issue, however, because Dr. Nettleton's opinion was proffered in response to the anticipated

testimony of the Government's expert witness, Bruce Dawert, regarding Company A's

investment in the research and development of iDEN. (R. 177, Def.'s Resp. at 12.) Depending

on the facts and opinions put forth by Mr. Dawert at trial, it may be appropriate for Dr. Nettleton

to opine on the "Sunk Cost Dilemma." The Court will revisit this issue if necessary at trial after

Mr. Dawert's testimony.

CONCLUSION

For the foregoing reasons, the Government's motion to exclude certain expert testimony

by Jin's expert witness, Dr. Ray W. Nettleton, (R. 163, Govt. Mot.), is granted in part and denied

in part. The motion is granted with respect to Dr. Nettleton's proposed testimony regarding the

possibility for reverse-engineering of the iDEN technology. The Court will reserve ruling on the

Dr. Nettleton's testimony regarding the "Sunk Cost Theory" until trial. The Government's

motion is denied in all other respects.

Entered:

Judge Ruben Castillo

**United States District Court** 

Dated: November 3, 2011

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